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CHRISTMAS!

How brightly the sun shines up in the blue wintry sky, and how dazzlingly white the earth looks in her pure robe of snow! The church bells ring out merrily on the crisp air, and the holiday folk look bright and happy in their Sunday clothes and cheery smiles. For it is Christmas-day! And to many what does that word not mean? Enjoyment, comfort, and a good hot dinner for, at any rate, once in the long year. Christmas, to all children's ears, whether rich or poor, has a delightful, charmed sound. For weeks before the eventful day arrives, they think of it and talk of it, joyously anticipating all the wonders it will bring forth. For those that are rich, it acts the part of some kind fairy, who loves little children, and comes to them with lips warm with kisses, and what is better, arms full of beautiful gifts. Before they are awake, she comes softly into the room, and with her magic wand touches the chair or table by their bedsides, and lo! it blooms into a rich luxuriance of toys! Beautiful dolls, in wonderful flaxen tresses and superb toilets; elegant china tea-services, and chairs and tables for their use, and dainty *bonbon* boxes to prevent their starving before their new mistresses awake; giant Noah's arks, tops, puzzles, books, bags—all these and other wonders come to life by the enchanter's wand on Christmas morning. Perhaps, if the little folks woke earlier, they might be struck with the fairy's likeness to a familiar figure they have known and loved all their little lives; but they are young, and the young sleep so soundly.

To the poor man's child, Christmas is almost as wonderful. The poor child who rarely tastes meat, looks forward with perhaps greater pleasure to the hot beef and potatoes, than does the rich one to the turkey, plum-pudding, and mince-pies! Yes, Christmas is a never-ending delight to children; but as we grow older, we grow wiser and sadder, and somehow jovial Father Christmas seems to grow sadder too. For then the Past rises out of the darkness of oblivion, and lives once more, brightening us with its remembered joys, or

shadowing us with its sorrows. The very air we breathe seems full of memories; our minds, our homes, are filled with them. Sometimes they are bright and happy, and then we are bright and happy too; but often they are sad, and our eyes grow dim with quiet tears, and our hearts throb with forgotten pain. But for the children these things are not; they live in the present, joyous and unthinking. See how delighted they are! How they laugh and rejoice over their new toys, that the bright fairy brought them when they were asleep, and how they fling their little arms round their mother's neck, and kiss her with their rosy lips. She clasps them to her, and wishes them a merry Christmas, with a bright smile on her face; and they do not know that behind that smile she is thinking of another little figure with bright eyes, and warm arms and lips, who on former Christmas mornings used to kiss and thank her as they are doing now. They cannot tell that while they are eating their breakfast, chatting and disputing merrily, she had (in spirit) gone out through the cold into the little churchyard where her darling's grave lies pure and white under the soft winter snow, and glistens like diamonds in the sunshine. Then comes church; which, somehow, the children do not welcome quite so heartily as the other items of the day; but frequent mental peeps at the glorious dinner that is coming suffice to sustain them through the sermon (with its sweet old familiar story, which tells of the opening scenes of that most loving and beautiful of all lives), and when they come out into the sharp cold air, their spirits rise, and they run and skip merrily homewards through the pretty snow-clad meadows and lanes, where every block glistens with nature's gems, and every twig, and stalk, and leaf is a miracle of crystallised beauty. The crimson breast of robin shews like a splash of blood on the dazzling white hedge—he is going home to his dinner too, for he knows of a certain crumb-strewed window—and jerks his tail, and looks at the children with his bright black eyes, as they patter along, awaking the echoes of the air with their sweet treble voices, and snow-balling one

another till their cheeks and hands are as red as the robin.

The walk home is not so pretty for the town children—but they have the merry-making at the end of it just the same; for after that walk the real business of the day begins. Rat-tat-tat! Ring-ring-ting! go the knocker and the bell in a discordant duet; and soon the house is overflowing with uncles, aunts, and cousins. Every one is familiar with the dinner—in that there is usually not much variety—a fact which only serves to make it a better medium for memory. We take our places, and the warm room echoes with the hum of voices; we glance round at the many faces bent over the well-filled plates. The children's bright heads and flushed cheeks look so softly warm in the mellow lamplight, and the gray hair of their elders shines like silver. Those two round-faced, innocent-looking boys opposite, who have apparently laid a wager as to who shall eat the most in the shortest possible time, will certainly choke, even if they escape ruining their digestions. Feeling slightly nervous on their account, we turn away, and again look round at the sea of heads; and with a sudden pang we remember that one bright young face—that but a little while ago sat and laughed with the others—is missing now; for the angel of death came and stole the light from the loving eyes, and the colour from the rosy cheeks; and so missing her, our eyes grow dim with tears as they travel on to where another face is not—this time it is a sweet old face, with kind eyes and silver hair, that we have known and loved from childhood.

The charming thing about an English Christmas is, that it is the national festival for the renewal of early friendships. Relations rally round the head of the family. Petty differences are forgiven and forgotten. Good Christian feeling is demonstrated in a way perfectly unobjectionable. Those who, from necessity, are absent from the family circle are not forgotten. Some are married and gone; some, a son or brother perhaps, are away fighting life's battle far from home. Oh! how our hearts go out to them as we sit there. If our blessings have effect, how happy must they be! Could they but return to us for this one day, how happy we should be! Most likely that joy is in store for us, hidden away somewhere in the future. And we may be sure that they too are thinking kindly of us, and wishing they could be with us to help us to demolish the good cheer.

On Christmas-day the world's heart throbs in sympathetic unison from end to end; it enlarges and expands, and its sympathies are greater and reach farther than at other times. Even though it renews our sorrows and uncovers our sacred dead, yet it softens us, and deepens our feelings for others, and makes us more willing to be charitable to the poor. We like to know that they have their hot meat and even pudding for dinner, and we cannot bear to think of starving and homeless thousands, whom we know exist, and whom we are powerless to help. Then our thoughts take more frequent and longer flights than on other days—they traverse continents and oceans, carrying with them to our dear absent ones our love and our blessings—and they strive to pierce the thin, dark, mysterious veil which shuts us out from those other dear ones whom we have loved and lost. Human nature is vibrating with the

electricity of sympathy and love—and how can we tell that the vibration ceases here? Astronomers tell us that when a disturbance occurs among the electrical forces on the sun's surface, a corresponding disturbance takes place among those forces on the earth—causing auroras and magnetic storms.

May not the inhabitants of the spirit-world also feel, by sympathy, the vibration that is thrilling us here? Perhaps that day awakes memories in them, as it does in us! We look at the vacant places at the table through our tears, and feel sorrow in our hearts, and all the while the bright happy spirits of the dead we so loved may be there still—looking at us with sweet eyes, and radiant smiles that never fade—watching us—loving us—waiting for us—who knows? Only 'whilst this muddy vesture of decay doth grossly close us in, we cannot hear'—we cannot see them.

But all this time that we are growing so sad and puzzled with our thoughts, what a noise the children are making! how they laugh, how rosy their cheeks are, and how brightly their eyes shine in the yellow lamplight! Each cracker and each motto is greeted with fresh merriment—and as we look at them we envy them, and are inclined to wonder how they can be so happy and light-hearted. Ah, well! let them enjoy their young lives as long and as heartily as they can. They will not always be children—man is born to sorrow as the sparks fly upwards—and trouble may come soon enough. We were like them once, and revelled in our toys and our puddings and the mere wonderful fact of our existence, as keenly as they are doing—with never a thought of sorrow or weeping behind. And so at last, to the sound of laughter, and music, and dancing, the evening wears away. The pale moon shines up in the frosty star-spangled sky, making the earth seem a vast sea of white, as if she were some giant bird, and had lain down to rest. Once more the peaceful night closes us in, seeming to breathe over all nature as she comes with noiseless tread, threading her way through the golden stars. 'Peace on earth, goodwill to men!' and sleep comes gently to us, and blots out all our tired thoughts, and closes the children's laughing eyes, and hushes their merry voices, whilst the Night enfolds the tired earth more closely in her arms, and clasps it lovingly to her breast.

THE FLAG OF DISTRESS.

CHAPTER LIII.—THE TABLES NEARLY TURNED.

At the cliff's base, the action simultaneous, is yet more exciting. Having left their boat behind, with a man to take care of it, the rescuers advance towards the inner end of the cove. At first with caution, till, passing the rock-portal, they see the platform and those on it. Then the young officers rush forward, with no fear of having to fight. Instead of armed enemies to meet them, they behold the dear ones from whom they have been so long separated. Beside them, half-a-dozen figures, more like spectres than men—with cowed, craven faces, seeming so feeble as to have a difficulty in keeping their feet! With swords sheathed, and pistols returned to their holsters, they hasten on, the girls rushing out to receive them. Soon they are together, two and two, breasts touching, and arms enfolded in mutual embrace. For a while no

words—the hearts of all four too full for speech. Only ejaculations and kisses, with tears, not of sorrow. Soon follow speeches, necessarily brief and half-incoherent; Crozier telling Carmen that her father is still alive, and aboard the barque. He lives! he is safe! that is enough! Then, in answer to his questions, a word or two on her side; but without waiting to hear all, he turns abruptly upon Harry Blew, who is seen some paces off. Neither by word nor gesture has the sailor saluted him. He stands passive, a silent spectator; as Crozier supposes, the greatest criminal on earth.

In quick retrospect of what has occurred, and what he has heard from Don Gregorio, how could it be otherwise? But he will not condemn without hearing; and, stepping up to the ex-man-of-war's-man, he demands explanation of his conduct, sternly saying: 'Now, sir, I claim an account from you. Tell your story straight, and don't conceal aught, or prevaricate. If your treason be as black as I believe it, you deserve no mercy from me. And your only chance to obtain it, will be by telling the truth.'

While speaking, he draws his sword, and stands confronting the sailor, as if a word were to be the signal for thrusting him through.

Blew is himself armed, with both pistol and knife. But, instead of drawing or making any show of defence, he remains cowed-like, his head drooping down to his breast. He gives no response. His lips move not; neither his arms nor limbs. Alone, his broad chest heaves and falls, as if stirred by some terrible emotion. His silence seems a confession of guilt.

Taking, or mistaking, it for this, Crozier cries out: 'Traitor! Confess, before I run this blade through your miserable body!'

The threat elicits an answer. 'You may kill me, if you wish, Master Edward. By rights, my life belongs to ye. But, if you take it, I'll have the satisfaction o' knowin' I've done the best I could to prove my gratefulness for your once savin' it.'

Long before he has finished his strange speech, the impending stroke is stayed, and the raised blade dropped point downward. For, on the hand which grasps it, a gentler one is laid, a soft voice saying: 'Hold, Eduardo! What would you do? You know not. This brave man, to him I owe my life—I and Inez.'

'Yes,' adds Inez, advancing; 'more than life. 'Tis he who protected us.'

Crozier stands trembling, the sword almost shaken from his grasp. While sheathing it, he is told how near he has been to doing that which would ever after have made him miserable. He feels like one withheld from a crime—almost parricide. For, to have killed Harry Blew, would have been like killing his own father.

The exciting episode is almost instantly succeeded by another, still more stirring and longer sustained. While Carmen is proceeding to explain her interference on behalf of Blew, she is interrupted by cries, coming up from the beach. Not meaningless shouts, but words of ominous import: 'Ahoy, there! help! help!' Coupled with them, Crozier hears his own name, then the 'Help, help!' reiterated; recognising the voice of the man left in charge of the boat. Without hesitating an instant, he springs off toward the strand, Cadwallader and the gold-diggers following; two staying to keep

guard over those of the robbers who have surrendered. On clearing the rocky portal, they see what is causing the boat-keeper to sing out in such terrified accents—a sight which sends the scare through their own hearts, with cries of alarm from their lips. He in the boat is on his feet, with a boat-hook in his hands, which he brandishes in a threatening manner, shouting all the while. Four men are making towards him fast as their legs can carry them. They are coming along the strand from the right side of the cove. At a glance the young officers see who they are; at least two of them—De Lara and Calderon—sooner from their not meeting them unexpectedly. For aware that these are on the isle, they were about to go in quest of them, when summoned by the cries. No need to search for them now. There they are, with their confederates, rushing direct for the boat—already within pistol-shot of it! There can be no doubt as to their intent, and the certainty of it sends a cold shivering fear through the hearts of those who see them, all suddenly recognising a danger seeming as death itself. They remember having left only two or three men on the barque. Should the pirates succeed in boarding her, they may carry her off to sea, leaving the rescuers on the isle, and then—An appalling prospect, they have no time to dwell on, nor need; for it comes before them like a flash in all its horrid details. Without waiting even to exchange word with one another, they rush on to arrest the threatened catastrophe, bounding over the rocks, crashing through shells and pebbles. But they are behind time, and the others will reach the boat before them! Crozier seeing this, shouts to the man: 'Shove off! Into deep water!'

The sailor, understanding what is meant, brings the boat-hook point downward, and with a desperate effort pushes the keel clear, sending the boat adrift. But before he can repeat the push, pistols are fired, and, simultaneous with their reports, he is seen to sink down, and lie doubled over the thwarts. A yell of vengeance peals from the pursuing party; and maddened, they rush on. They will be too late. Already the pirates have reached the boat, now undefended; and all four together, swarming over the gunwale, drop down upon the thwarts, each laying hold of an oar, and shipping it. In agony, Crozier cries out: 'Oh, they cannot surely get away—those guilty wretches!' But it would seem so. They have dropped their oar-blades in the water, and commenced pulling, while they are beyond pistol-range. Ha! something stays them! An avenging Power stays them. Their arms rise and fall, but the boat moves not! Her keel is on a coral bottom; her bilge caught upon its rough projections. Their own weight pressing down, holds her fast, and their oar-strokes are idly spent!

They had not thought of being thus stayed; which proves the turning-point of their fate. No use their leaping out now, to lighten the boat; no time for that, nor any chance to escape. But two alternatives stare them in the face—resistance, which means death, and surrender, that seems the same. De Lara would resist and die; so also Rocas. But the other two are against it, instinctively holding on to whatever hope of life may be left them.

The craven Calderon cuts short the uncertainty by rising erect, stretching forth his arms, and

crying out in a piteous appeal for mercy. In an instant after they are surrounded, the boat grasped by the gunwale, and dragged back to the shore. Crozier with difficulty restrains the angry gold-diggers from shooting them down on the thwarts. Well for them the boat-keeper was not killed, but only wounded, and in no danger of losing his life. Were it otherwise, theirs would be taken on the spot. Assured of his safety, his rescuers pull the four wretches out of the boat; then disarming, drag them up to the platform, and bestow them in the larger cave; for a time to be their prison, though not for long. There is a judge present, accustomed to sit upon short trials, and pass quick sentences, soon followed by execution. It is the celebrated Justice Lynch.

Represented by a stalwart digger—all the others acting as jury—the trial is speedily brought to a termination. For the four of Spanish nationality the verdict is guilty—the sentence, death on the scaffold. The others, less criminal, to be carried on to Panama, and there delivered over to the Chilean consul; the crime being mutiny, with robbery, and abandonment of a Chilean vessel. An exception is made in the case of Striker and Davis. The 'Sydney Ducks' receive conditional pardon, on promise of better behaviour throughout all future time. This they obtain by the intercession of Harry Blew, in accordance with the hint he gave them while they stood beside the spread tarpauling.

Of the four sentenced to be hanged, one meets his fate in a different manner. The gold-dust has been recovered, packed, and put into the boat. The ladies are cloaked, and impatient to be taken back to the barque, yearning to embrace him they so long believed dead. The young officers stand beside them; all awaiting the last scene of the tragedy—the execution of the condemned criminals. The stage has been set for it; this the level plot of ground in front of the cavern's mouth. A rope hangs down with a running noose at one end; the other, in default of gallows arm and branch of tree, rigged over the point of a projecting rock. All this arranged, De Lara is led out first, a digger on each side of him. He is not tied, nor confined in any way. They have no fear of his making escape. Nor has he any thought of attempting it; though he thinks of something else, as desperate and more deadly. He will not die like a scared dog, but as a fierce tiger, to the last thirsting for blood, to the end trying to destroy—to kill! The oath sworn to Calderon on the cliff, he is still determined on keeping. As they conduct him out of the cave, his eyes, glaring with lurid light, go searching everywhere, till they rest upon a group some twenty paces distant. It is composed of four persons: Crozier and Carmen Montijo, Cadwallader and Inez Alvarez, standing two and two. At the last pair De Lara looks not, the first enchainning his attention. Only one short glance he gives them; another to a pistol which hangs holstered on the hip of a gold-digger guarding him. A spring, and he has possession of it; a bound, and he is off from between the two men, rushing on towards the group standing apart.

Fortunately for Edward Crozier—for Carmen Montijo as well—there are cries of alarm, shouts of warning, that reach him in time. He turns on hearing them, sees the approaching danger, and takes measures to avert it. Simple enough these

—but the drawing of his revolver, and firing at the man who advances.

Two shots are heard, one on each side, almost simultaneous; but enough apart to decide which of the two who fired must fall. Crozier's pistol has cracked first; and as the smoke of both swirls up, the gambler is seen astretch upon the sward, blood spurting from his breast, and spreading over his shirt bosom!

Harry Blew, rushing forward, and bending over him, cries out: 'Dead! Shot through the heart—brave heart too! What a pity 'twas so black!'

'Come away, *mia!*' says Crozier to Carmen. 'Your father will be suffering from anxiety. You've had enough of the horrible. Let us hope this will be the end of it.'

Taking his betrothed by the hand, he leads her down to the boat—Cadwallader with Inez accompanying them.

All seat themselves in the stern-sheets, and wait for the diggers; who soon after appear, conducting their prisoners—the pirate crew of the *Condor*—short four left behind, a banquet for the vultures and sea-birds.

CHAPTER LIV.—A SAILOR'S TRUE YARN.

It is the second day after the tragic scene upon the isle, and the Chilean barque has sailed away from the Veraguan coast, out of that indentation known upon modern maps as 'Montijo Bay.' She has long since rounded Cabo Mala, and is standing in for the port of Panama. With a full crew—most of them old and able seamen—no fear but she will reach it now. Crozier in command, has restored Harry Blew to his situation of first-officer; which, so far from having forfeited, he is deemed to doubly deserve. But still weak from his long privation, the ex-man-o'-war's man is excused from duty, Cadwallader doing it for him. Harry is strong enough, however, to tell the young officers what they are all ears to hear—the story of that *Flag of Distress*. Their time hitherto taken up attending upon their *fiancées*, they have deferred calling for the full account, which only the English sailor can give them. Now having passed Cabo Mala, as if with the 'wicked cape' all evil were left behind, they are in the mood to listen to the strange narration in all its details; and summon the chief-officer to their side.

'Your honours!' he begins, 'it's a twisted-up yarn, from the start to the hour ye hove in sight; an' if ye hadn't shewed yerselves just in the nick o' time, an' ta'en the twist out o' it, hard to say how 'twould a ended. No doubt, in all o' us dyin' on that desert island, an' layin' our bones there. Thank the Lord, for our delivery—without any disparagement to what's been done by both o' you, young gentlemen. For that He must ha' sent you; an' has had a guidin' hand throughout the whole thing, I can't help thinkin', when I look back on the scores o' chances that seemed goin' against the right, an' still sheered round to it after all.'

'True,' assents Crozier, honouring the devout faith of the sailor. 'You're quite right in ascribing it to Divine interference. Certainly, God's hand seems to have been extended in our favour. But go on!'

'Well, to commence at the beginnin', which is when you left me in San Francisco. As I told Master Willie that day he come ashore in the

dinky, I war engaged to go chief-mate in the Chili barque. She war then a ship; afterward converted into a barque as ye see, through our shortness o' hands. When I went aboard her, an' for sev'ral days after, I war the only thing in the shape o' sailor she'd got. Then her captain—that poor crazed creetur below—put advertisements in the papers, offering big pay; the which, as I then supposed, brought eleven chaps, callin' themselves sailors, an' shippin' as such. One o' 'em, for want o' a better, war made second-mate—his name bein' entered on the books as Padilla. He war the last o' the three swung up, an' if ever man deserved hangin', he did, bein' the cruellest scoundrel o' the lot. After we'd waited another day or two, an' no more makin' appearance, the skipper made up his mind to sail. Then the old gentleman, along w' the two saynoreetas, came aboard; when we cleared an' stood out to sea. Afore leavin' port, I had a suspishun about the sort o' crew we'd shipped. Soon's we war fairly afloat, it got to be somethin' worse than suspishun; I war sartin then we'd an ugly lot to deal with. Still, I only believed them to be bad men—an', if that war possible, worse seamen. I expected trouble w' them in sailin' the vessel; an' a likelihood o' them bein' disobedient. But on the second night after leavin' land, I found out somethin' o' a still darker stripe—that they war neither more nor less than a gang o' piratical conspirators, an' had a plan aready laid out. A lucky chance led to me discoverin' their infarnal design. The two we've agreed to let go, Striker an' Bill Davis—both old birds from the convict gangs o' Australia—war talkin' it over atween themselves, an' I chanced to overhear them. What they sayed made everythin' clear—as it did my hair to stand on end. 'Twar a scheme to plunder the ship o' the gold-dust Don Gregorio hed got in her; an' carry off your young ladies. Same time they war to scuttle the vessel, an' sink her; first knockin' the old gentleman on the head, or drownin' of him as well as the skipper. Your humble sarvant an' the darkey war to be disposed o' same sweet fashion. On listenin' to the dyabolikal plot, I war clear dumfounded, an' for a while didn't know what to do. 'Twar a case o' life an' death to some o' us; an' for the saynoreetas, somethin' worse. At first, I thort o' tellin' Captain Lantanas, an' also Don Gregorio. But then I seed if I shud, that't would only make death surer to all as were doomed. I knowed the skipper to be a man o' innocent, unsuspishus nature, an' mightn't gie belief to such 'trocious rascality, as bein' a thing possible. More like he'd let out right away, an' bring on the bloody bizness sooner than they intended it. From what Striker an' Davis said, I made out, that it war to be kept back till we should sight land near Panama. After a big spell o' thinkin', I seed a sort o' way out of it—the only one appearin' possible. 'Twar this: to purtend joinin' in w' the conspirators, an' put myself at thar head. I'd larnt from the talk o' the two Sydney Ducks, there war a split 'mong them, 'bout the dividin' o' the gold-dust. I seed this would gie me a chance to go in along w' them. Takin' advantage o' it, I broached the bizness to Striker that same night, an' got into thar councils; afterwards obtainin' the influence I wanted. Mind ye, gentlemen, it took a smart show o' trickery an'

maneuvin'. Among other things, I had to appear cool to the cabin people throughout all the voyage—specially them two sweet creeturs. Many's the time my heart ached a-thinkin' o' yourself, sir, as also o' Master Willie—an' then o' your sweet hearts, an' what might happen, if I shed fail in my plan for protectin' 'em. When they wanted to be free an' friendly, an' once began talkin' to me, I hed to answer 'em gruff an' growlin' like, knowin' that eyes war on me all the while, an' ears a-listenin'. As to tellin' them what was before, or givin' them the slimmest hint o' it, that would a spoilt my plans. They'd a gone straight to the old gentleman, an' then it would a been all up w' us. 'Twar clear to me they all couldn't then be saved, an' that Don Gregorio himself would hev to be sacrificed, as well as the skipper an' cook. I thought that dreadful hard; but thar war no help for't, as I'd have enough on my hands in takin' care o' the women, without thinkin' o' the men. As the Lord has allowed, an' thank Him for it, all have been saved!

The speaker pauses in the fervour of his gratitude, which his listeners respecting, in silence wait for him to continue. He does so, saying: 'At last, on sightin' land, as agreed on, the day had come for the doin' o' their dark deed. It war after night when they set about it, myself actin' as a sort o' recognised leader. I'd played my part so's to get control o' the rest. We first lowered a boat, puttin' our things into her. Then we separated, some to get out the gold-dust, others to seize the saynoreetas. I let Gomez look after them, for fear of bringin' on trouble too soon. Me an' Davis—who chances to be a sort o' ship's carpenter—were to do the scuttlin'; an', for that purpose, went down into the hold. There, I proposed to him to give the doomed ones a chance for their lives, by lettin' the *Condor* float a bit longer. Though he be a convict, he warn't nigh so bad as the rest. He consented to my proposal, an' we returned on deck 'thout tappin' the barque's bottom timbers. Soon's I had my head over the hatch comb'n', I seed them all below in the boat, the girls along w' them. I didn't know what they'd done to the Don an' skipper. I had my fears about 'em, thinkin' they might ha' been murdered, as Padilla had proposed. But I daren't go down to the cabin then, lest they might shove off, an' leave us in the lurch; as some war threatenin' to do, more than one wantin' it, I know. If they'd done that—well, it's no use sayin' what might ha' been the upshot. I seed 'twould a knocked all my plans on the head; an' tharfor, hurried down into the boat. Then, we rowed right away; leavin' the barque just as she'd been the whole o' that day. As we pulled shoreward, we could see her standin' off, all sails set—same as tho' the crew war aboard o' her workin' 'em.'

'But her ensign reversed?' asks Cadwallader. 'She was carrying it so, when we came across her. How came that, Harry?'

'Ah! the bit o' buntin' upside down! I did that overnight myself in the dark; thinkin' it might get them a better chance o' bein' picked up.'

'And you did the very thing!' exclaims Crozier. 'I see the hand of Providence in that, surely! But for the distress signal, the *Crusader* would have kept on without giving chase; and—'

But, proceed! Tell us what happened afterwards.

'Well; we landed in the island, not knowin' it to be a island. An' theer's another o' the chances, shewin' we've been took care o' by the little cherub as sits up aloft. If 't hed been the mainland—well, I needn't tell ye, things would now be different. Arter landin', we stayed all night on the shore; the men sleeping in the biggest o' the caves, while the ladies occupied a smaller one. I took care 'bout that separation myself, detarmined they shouldn't come to no harm, that night. There war a thing happened which I daresay they've told you; an' 'twar from them I afterwards larned that Gomez an' Hernandez war no other than the two chaps you'd trouble wi' at San Francisco. They went into the cave, an' said some insultin' things to the saynoreetas; but I warn't far off, an' would a made short work wi' them, hed it goed further than talk. Up at a early hour next mornin', we found the boat hed drifted off seaward, an' got bilged on the breakers. But supposin' we shouldn't want her any more, nobody thought anythin' about it. Then comed the dividin' o' the gold-dust, an' after it the great questyun—leastwise, so far as I war concerned—as to who should take away the girls. I'd been waitin' for this, an' now for the settlin' o' I war ready to do or die. Gomez an' Hernandez war the two who laid claim to 'em—as I knowed, an' expected they would. Pretendin' a likin' for Miss Carmen myself, an' puttin' Davis up to what I wanted, we too made our claim. It ended in Gomez an' me goin' in for a fight; which must a tarminated in the death o' one or other o' us. I hed no dread o' dyin'; only from the fear o' its leavin' the poor creeturins unprotected. But thar war no help for 't, an' I agreed to the duel; which war to be fought first wi' pistols, an' finished up, if need be, wi' the steel. Everythin' settled, we war 'bout settin' to, when one o' the fellows—who'd gone up the cliff to take a look ahead—just then sung out, that we'd landed on a island. Recallin' the lost boat, we knew that meant a dreadful danger. In coorse it stopped the fight, an' we all rushed up to the cliff. When we saw how things stood, there war no more talk o' quarrellin'. The piratical scoundrels war scared right out o' thar senses; an' would a been glad to get back aboard the craft they'd come out o', the which all, 'ceptin' Davis an' myself, supposed to be at the bottom o' the sea. After that, 'twar all safe, as far as concerned the saynoreetas. To them as would ha' took 'em, they war but a second thought, in the face o' starvation; which soon tamed the wolves down, an' kep 'em so till the last o' the chapter. Now, gentlemen; ye know how Harry Blew hav behaved, an' can judge for yourselves, whether he's kep the word he gied you 'fore leavin' San Francisco.'

'Behaved nobly, grandly!' cries Crozier. 'Kept your word like a man: like a true British sailor! Come to my arms—to my heart, Harry! And forgive the suspicions we had, not being able to help them. Here, Cad! Take him to yours; and shew him how grateful we both are to the man who has done more for us than saving our lives.'

'Bless you, Blew! God bless you!' exclaims Cadwallader, promptly responding to the appeal; and holding Harry in a hug that threatens to strangle him.

The affecting scene is followed by an interval

of profound silence; broken by the voice of Grummet, who, at the wheel, is steering straight into the port of Panama, now in sight.

'Mr Crozier!' calls out the old coxswain, 'ye see that craft, sir—the one riding at anchor, out yonder in the roadstead?'

All turn their eyes in the direction indicated; soon as they have done so, together exclaiming: 'The *Crusader*!'

The last scene of our story occurs at Cadiz, in a grand cathedral church. Before its altar stand two English naval officers, alongside each a beautiful Spanish damsel, soon to be his wedded wife. It scarce needs to tell, that the bridegrooms are Edward Crozier and Willie Cadwallader. Nor need it be told who are the brides; since they are to be given away by Don Gregorio Montijo. Nor is it necessary to describe the ceremonial splendour of that double wedding—for long time the great topic of Cadiz. Enough to say, that present at it are all the wealth and fashion of the old Andalusian city, with foreign consuls, and the commanders of war-ships in the port; conspicuous amongst these, Captain Bracebridge, and the officers of H.B.M. frigate *Crusader*. Also two other men of the sea—of its merchant service; to hear of whose presence there, will no doubt make the reader happy, as it does both brides and bridegrooms to see them. They belong to a ship lying in the harbour, carrying polacca masts, on her stern lettered *El Condor*; one of the two being her captain, called Lantanas; the other her chief-officer, by name Blew. The good fates have been just and kind to the gentle Chilean skipper, having long since lifted from his mind the cloud that temporarily obscured it. He now knows all, above all, Harry Blew in his true colours; and, though on the *Condor's* deck they are still captain and mate, when below by themselves in her cabin, all distinction of rank disappears, and they are affectionate friends—almost as brothers. In the prosperous trading-craft, *Condor*—reconverted into her original ship-rig—regularly voyaging between Valparaiso and Cadiz—exchanging the gold and silver of Chili for the silks and sweet wines of Spain—but few recognise a barque once chased over the South Seas, believed to be a spectre; and, it is to be hoped, no one will ever again see her sailing under a FLAG OF DISTRESS.

THE END.

CRAGSMEN AND THEIR PERILS.

THOSE who risk their lives by clambering up and down precipitous cliffs are, so far as public appreciation goes, generally to be met with in alpine countries, where walls of rock two or three thousand feet high are to be encountered. Readers are never tired of narratives of their adventures, if told with graphic effect. There are three classes of such adventurers. In the first class are the men of science, who, in the laudable pursuit of knowledge, risk their lives in the ascertainment of facts bearing upon botany, ornithology, astronomy, geology, climatology, the formation and movements of glaciers, &c. All honour to the Humboldts and Bonplands, the Saussures and Deluc, the Forbeses and Tyndalls. In the second class may be placed those who clamber up and down for the glory of the thing, to excel (and perhaps to crow over) their

stay-at-home friends. These are the tourists who 'do' Mont Blanc, Monte Rosa, the Matterhorn, the Oertler Spitze, and other break-neck mountains. Of course, we hope that they, especially the lady-tourists, will not break their necks; but still such adventures, though involving a certain amount of endurance and not a little excitement, deserve only secondary commendation, when no scientific discoveries result therefrom. The real cragsmen, who may be grouped by themselves, are the hunters, whose lives are imperilled in the search for their daily bread. True, the chamois-hunter and the hunters of other mountain animals do not reach such wonderful ledges and jutting rocks as do the animals themselves; nevertheless, they climb to very perilous spots to get a shot at their quarry, and to pick it up when shot.

There is another kind of cragsmen or cliffmen, however, much less frequently talked of and written about; namely, those who capture wild-fowl on the precipitous cliffs of rugged coasts. We know comparatively little concerning them, because travellers and tourists seldom find their way to the scenes of their dangerous calling, almost always desolate and inhospitable, though sublime in natural features.

This word 'fowl' is rather a puzzling one. What is a fowl? Some will give an answer by enumerating the varieties of Dorking, Bantam, Cochinchina, Sumatra, Jungle, Polish, Spanish, Frizzled, Fork-tailed, &c. Some, knowing that many kinds of fowl patronise the lake and the pond rather than the field and yard, feel that the answer must make some mention of Swans, Wild Ducks, Widgeon, Dunbirds, Teal, Sheldrakes, Coots, Curlews, Snipes, Lapwings, and other feathered bipeds so well known to the fowler of fen countries. But besides these two groups, there is one comprising those sea-birds or cliff-birds which shun the haunts of man and his belongings. These consist chiefly of Gannets, Guillemots, Razor-bills, and Puffins. Living mostly on fish, they roost near where fish can be caught; and no home pleases them better than the shaggy precipitous wall of a sea-cliff, which is sure to present numerous holes and corners, nooks and shelves, where the birds can nestle. As the flesh of the young birds is eatable, though of a fishy flavour, and as the feathers, down, and oil can always find a market, the birds are of considerable commercial importance. But what a life of peril is their capture, what a hard way of earning one's daily bread!

George and Peter Anderson describe the work of the sea-bird catchers at Handa, an island off the north-west coast of Scotland, opposite Skourie. On the seaward side of that small island is a cliff two miles long by six or seven hundred feet in height, almost perpendicular, and so smooth as to offer few facilities for foot-hold. There are here and there indentations and detached columnar masses, which are known alike to the birds and to their pursuers. On the narrow horizontal ledges of the cliffs, thousands of gannets, razor-bills, puffins, guillemots, and other sea-fowl, sit as closely together as they can be wedged, while thousands of others are on the wing during the breeding season—which is the best time for the fowler. A shot fired sets inconceivable numbers of birds on the wing. But some, either through natural stubbornness or from some other cause, stick to their roosting-places with the utmost pertinacity; stones and even shots failing to dislodge them. It is a common thing

for the daring fowlers, after much climbing up and down, to enter crevices into which we could hardly imagine men venturing, to take the birds by hand, or collect the large richly tinted, spotted eggs. Where the face of the cliff is too precipitous to permit even a cragsman to do this, he is let down by a rope from above, to a spot where he can capture his prey with a noose, or a hook, fastened to a short stick; sometimes the catch is very abundant in a short space of time. Whether the fowler heaves the killed birds to a boat stationed at the base of the cliff, or ties them round his waist, or signals to have them drawn up by a line to which many are strung at once, depends on the conformation of the cliff at each particular spot. The nestling season usually lasts from the middle of May to the middle of August; and it is only at such time that the sea-birds congregate there in any considerable number. Desolate Handa has few visitors except the fowlers. Once a ship was wrecked on the coast, and the yards tilted over so close to the face of the cliff as to enable some of the hapless seamen to clamber upon ledges and into recesses. How long they remained there, we are not told; but fortunately some fowlers, or it may be some fishermen, attracted to the spot by seeing the wreck of the vessel, espied the poor fellows, and rescued them while a little life still remained.

More wild, more perilous, more exciting even than that of Handa, is the sea-fowling at St Kilda. Indeed, an ordinary landsman can with difficulty conceive how the work can be carried on. St Kilda is a lonely island, eighty miles out westward beyond Lewis and Harris, two of the Hebrides. Strangers seldom approach the small island—it is only three miles long by two in breadth—except by an occasional steamer or a government cutter; but fishermen from Harris occasionally venture thither in open boats. There is only one landing-place, and this very difficult of access; all the rest of the coast is a rugged cliff from eight hundred to a thousand or more feet in height. A few inhabitants pick up a living on the island, partly by cultivating small patches of poor land, partly by fowling during the summer months. A fowling-party generally consists of four persons. Each party has at least one rope, about two hundred feet long, three-ply, and of strong raw cowhide prepared for the purpose; it is covered with dressed sheepskin to save it from chafing against the edges of the rock. A well-made rope of this kind is highly valued, and is even bequeathed by the owner to his successor, or given as a dowry with his daughter. A fowler descends the face of the cliff, suspended by the rope, which is held from above by two or three men. Armed with a staff or pole, to one end of which is fastened a piece of hair-line, he proceeds to search for birds. The hair-line is formed into a running noose, which he throws over the head of any bird sufficiently near; and by pulling it towards him the noose tightens upon the bird's neck, and secures its capture. Sometimes, linked together in couples, each with the rope fastened round his body, the fowlers clamber along the face of the cliff. When one is moving, the other plants himself on a ledge or shelf, obtains a firm foot-hold, and holds himself in readiness for exigencies; if his companion slips or stumbles, unflinching steadiness and a strong rope can alone avert disaster.

When the first man has arrived at a safe landing-ledge, he maintains a firm hold while the second follows. Some authorities state that one single man on the top of the cliff holds and manages the rope by which the fowler is suspended; but others assert—and we think with more probability—that two or more are generally employed.

The coasts of Norway, which are in some places more rugged, and grander in scale, than any of those in Scotland or the Hebrides, exhibit the characteristics of cliff-fowling with remarkable completeness. Mr Lloyd, who knew Norway better than almost any other Englishman, gives a graphic account of the system there pursued, in his *Scandinavian Adventures*. On some of the magnificent cliffs, two modes of getting at the birds and their nests are adopted—from the sea beneath, if the height to be climbed is not too great; from the edge of the cliff above, in other cases. When the men see their work fairly before them, as viewed from below, they approach the foot of the cliff in a boat. A pole, twenty or twenty-four feet long, has an iron hook at one end. This hook is looped into the strong waistband of the fowler's dress, and he is lifted or pushed up by men in the boat, or from any ledge of rock flat enough to sustain them; the lifting is something like that adopted by a butcher when he hooks up a leg of mutton in front of his shop; but the fowler aids his own ascent, partly by his hands, partly by a bird-pole which he carries with him. When he is safely lodged on any shaft or ledge of projecting rock that may afford foot-hold, a companion is hoisted up in a similar way. The two men then tie the rope to their bodies, the length of rope depending on the probable work required of it. One begins to climb up as high as he can, being pushed up by the flattened end of the pole held by his companion. When the uppermost man has reached a ledge that affords him anything like standing-room, however narrow and precarious, he pulls up the other by means of the rope. And so they proceed: No. 2 pushing up No. 1, and then No. 1 pulling or drawing up No. 2. The bird-pole having a hook at one end and a flattish top at the other, is invaluable on these occasions. When the two men reach a height at which the birds can be met with, one plants himself as firmly as possible on a ledge, to act as a stay or check; while the other gropes with hands and hook to capture the birds. If the latter slips, the former holds him up by the sheer resistance of the rope which binds the two together. Alas for both of them, if there be any weakness of muscle or of nerve at this moment!

The birds, not expecting to be disturbed so high up the face of the cliff, are comparatively tame, and are captured without resistance; a knock on the head seals their fate, prior to being heaved out into the sea and picked up by the attendant boat. To avoid being struck by a falling bird requires very great caution on the part of the boatmen, who accordingly give the rock a pretty wide berth, until the cragsmen, ceasing their labours for a while, permit the floating birds to be gathered. The velocity of a falling, full-fledged gannet would suffice to stave the stoutest open boat. If the weather be fine, the fowlers will remain several days and nights together up aloft, when they can find ledges broad enough to sleep on, or recesses into which they can creep; food and other necessities can be hauled

up by them from below—a hard way of earning a living, truly. In bygone times there was a law in Norway, strikingly illustrative of the dangers of this employment. When a fowler was killed by falling from the scarp of these terrible cliffs, his nearest relative was required to attempt the same adventure; if he succeeded, Christian burial was allowed to the body of the deceased; but if he could not or would not make the attempt, it was concluded that the death had been caused by recklessness, or want of judgment; the deceased was declared to have been the cause of his own death, and his corpse was awarded the un-Christian interment of a suicide. This strange law has not been acted upon in recent times.

Where the cliff is too high to be reached from the water, the fearless cragsmen of Norway commence their operations from above. A strong rope or rock-line, five or six hundred feet long, and two or even three inches in thickness, is fastened at one end round the waist of a fowler, and then passed between his legs in such a way that he can sit upon it. Six men at the top hold the rope, and 'pay it out,' lowering it by degrees; a smooth piece of wood being placed at the edge of the precipice, to shield the rope from chafing against rock. A smaller rope, also coiled round the fowler's waist, enables him to transmit such signals as 'higher,' 'lower,' 'right,' 'left,' 'stop,' &c. In constant peril from loose pieces of rock striking him in their fall, his chief defence is a thickly-lined fur cap to protect the head; his body and limbs defending themselves as best they may. The bird-pole is dexterously wielded. By thrusting the end of the pole against the vertical face of the rock, the cragsman can spring out to a considerable distance, and approach the cliff again at a different spot; he can do this even by the pressure of his feet alone against the rock, if his bound is to be of smaller range. This springing out and in again is much adopted where recesses occur beneath jutting portions of rock; the birds like to nestle in such spots, and the fowler gets a good haul each time his spring brings him to a fresh place. In some situations, where the recess is large enough, he loosens himself from the rope, which he temporarily fastens to a stone, and, moving about more easily, captures the birds with both hands; these he ties together with a small line, and signals to have them drawn up. Again he fastens himself to the rope, when his harvest at that spot has been gathered. Thus he will pass several hours of the day, until fatigue or appetite impels him to signal to be hauled up. If he be not firm and steady, and if the rope by which he is attached rotates, his chance becomes very precarious. An old Norwegian pastor said that these fowlers 'often expose themselves to the most imminent danger, merely to get a subsistence for their poor families, trusting in God's mercy and protection; to which the greater part of them seriously recommend themselves before they undertake the perilous work.'

It is evident, from the above details, that where the face of the cliff is exceptionally lofty and scarped, the co-operation of several men is necessary. If the suspension rope is really three inches thick, as Lloyd states, a cable of it five or six hundred feet in length must be very heavy; but we surmise that a thickness of two inches or thereabouts is more probable. Six men at

the top of the cliff will scarcely be needed to hold it at one time; more probably they work by relays. Where the operations are not of so formidable a character, one man will sometimes make the descent unaided; he fastens the rope round a post at the top of the cliff, lowers himself by it to a small depth, and, when he has caught a bird or two, hauls himself up again hand over hand. Be it done how it may, the daring exhibited is almost inconceivable to inland folk; for a ledge that can only be grasped by the fingers, and is wide enough only for half the length of the foot, will be made available as holding-ground by the fowler. Where the circumstances are favourable, ropes of moderate length are firmly fastened to jutting pieces of rock, and allowed to hang down at full length, ready to assist the fowlers at any time during the season, and removed when winter is coming on. There is a code of honour among these men: nothing belonging to one is used or removed by another without the owner's consent; there is a community of feeling among those who incur a common danger.

At the Bass Rock, a lonely islet in the Firth of Forth, where hundreds of young gannets or solan geese are annually taken, one man sometimes suffices to lower away the cragsman and attend to his signals. The number of young gannets taken in a season ranges from eight hundred to fourteen or fifteen hundred, according as the weather permits: these are stripped of their down, and either baked for eating, or boiled down for oil. This isolated rock is uninhabited save by sea-fowl, and in squally weather is exceedingly difficult to land upon, so that the 'keeper' or lessee, who dwells on the mainland two miles off, is entirely dependent upon moderately good weather for his season's take. This season (1875) has been a poor one, many of the young gannets having become fledged—and flown—before the weather would permit of cliff-operations. And here we may take the opportunity of informing our readers that the stock of solan geese on the Bass is now much smaller than it formerly was, the number of mature birds being estimated—though *myriads* are spoken of—at not more than twelve to fourteen thousand.

THE CLYTIE.

CHAPTER I.

NEAR an open window, overlooking the Square, sat Marian Elton writing a letter, as an Italian boy came by hawking some plaster images. The morning was so lovely that she felt the influence of its brightness with a warm glow of heart-gladdness which sunlight upon flowers has the power of imparting; and just then the dancing rays shone so beamingly upon the flower-box on the window-ledge, that she looked up to watch the dazzling effect, and inhale the perfume which the fragrant blossoms, as it seemed to her, exhaled gratefully.

The Italian boy, catching her eye as she thus paused, looked entreatingly, and begged her to buy one of his images. A glance at his woe-begone face touched her heart. 'Perhaps he is hungry,' she thought; and she beckoned him to call, while she rang the bell to have him admitted—not that she wanted any of his wares, but she felt some compunction in suffering a fellow-creature who

looked hungry to leave her door unfed, or without the means of procuring food. There were many very well designed images in his basket; but as her object was to relieve him, she took the first that offered—a miniature bust of Clytie. For the little image she paid him the price he asked, which was double its real worth. She knew he was cheating her, but she was one of those who could make allowance for the temptations of grim poverty, which finds honesty an almost impossible virtue when running a race with want.

On coming back to the room, she placed the Clytie on an empty bracket, and continued her writing; while every now and then she paused to take a glance at her purchase, with a feeling of compassion, as she recalled the mythological legend, and thought it but symbolised a fact of common occurrence. She regarded the Clytie (the water-nymph, whose love for the sun-god Apollo being unreturned, she was changed into a sun-flower, that she might ever follow his course) as the ideal of unrequited but constant affection—the unhap-piest of woes for a woman to bear; so it seemed to her just then, and a shadow fell upon her spirits in the contemplation. 'Would her purchase prove an omen?' was a question which kept tormenting her mind, as she wrote to her friend the following:

'I have just bought a Clytie. O Amy, suppose I also love in vain! I feel that, like her, I too would for evermore turn, spell-bound, towards the sun of my world. It is appalling to think how utterly my heart has gone from me; and I have no sure hope that I shall ever find it where alone I care to keep it.

'We met again last night, when his coldness amounted to repulsion, but a repulsion which attracts me more than all the compliments I receive from the many who seem to court me. My life is now but weariness, unspent in his society. I live but in the hours when I know he is by; although, oddly enough, while full of conversation with those around, he rarely ever addresses me.

'And yet—and yet—*intuition!* I am mad to use the word; it is, after all, but a delusion of my overwrought brain, which imagines what it longs for. Forgive me, Amy; but I know that with you my feelings will be held sacred; and as it eases my overfull heart to pour them out to one so sympathetic and *safe*, you will not deny me the luxury my friendship calls thus largely upon your good-nature to honour, knowing, as I do, that your love is equal to any demands of mine on that score.

'It seems little else than a fatality which has overtaken me! You know, I may speak thus to you without vanity—that I have never lacked for that chivalrous attention which is gratifying to most girls. I have accepted it with appreciation, but nothing more; my heart, throughout, has remained intact; until, or even *before* he came. It is so strange; my interest awoke from the moment my cousin Harry's wife said to me one day, about a year ago: "We expect a visitor; an old friend of Harry's; they were at college together. I have heard so much of him, that I am quite curious to see this Mr Leonard Faithfull. Charming name, is it not?"

'I felt it so, and recalled what Balzac says in other words, "Who shall account for the attraction

of a name?" Laugh at me, Amy; I deserve it, for these confessions of mine are those of a girl who is but too alive to her foolishness!

'Yes, I conjured up visions of the man; visions which were more than realised when I met him for the first time at the Nugents, and he took me into dinner. I can only describe him to you as he then impressed me. A tall, fair, Saxon type of man on a grand scale; with light hair and beard, who spoke little, and was perfectly self-contained. Imagine my being attracted by such an opposite! but so it was.

'His remarks were few, and I was tongue-tied; so much so, that Harry said to me across the table: "Marian, why are you so silent? You are usually lively enough.—I hope, Faithfull, you have not overpowered my little cousin."

'He turned quietly towards me, and smiled, saying: "I should regret such a catastrophe for you, Miss Elton. I hope I am not so formidable as all that."

'I stammered out some senseless reply not at all to the purpose; but we advanced to a better understanding after that, for he began telling me of his travels, and I am sure that I rivalled Desdemona in the interest with which I listened. How I regretted the move to the drawing-room, which obliges ladies to yawn together for half an hour in each other's company! As I sat meditating after dinner, in a corner by myself, I could not help exclaiming, mentally: "You poor, foolish Marian! the serpent has got at last into your happy Eden of girlhood, and stolen away your peace for ever!"

'It is awful to awake to the truth of the *situation*; and how was I to hide it?—I, who am afflicted with a temperament that cannot bear the burden of a secret. I was ready to cry with vexation, to find that my independence of mind and will had so utterly gone from me; and yet, across my tears there gleamed a flash of such glorious electric sunlight, that I was nearly blind with joy when I realised for an instant the bare possibility of my ever winning the love of such a man! And then—transcendent folly!—I began to catalogue my qualities silently. What had I to attract one who, to my mind, was so far above me? At that moment, Amy, dear, I felt that I was the plainest, most commonplace woman in existence! and—will you believe the human heart is capable of such base intricacies?—began to look jealously upon every pretty woman in the room, who possessed in this respect chances so much greater than my own!

'If you do not think that I am a fit subject for the Commissioners in Lunacy to take note of after this confession, your forbearance reaches even unto the *ideal* of friendship, so rarely to be met with in this terrestrial sphere of perpetual disappointments.

'I was surrounded shortly after the gentlemen came into the room, and could scarcely disguise the boredom I felt, until that most pertinacious of men, William Blakeney, who vows he will never take my "No" for an answer, worried me to death by asking me why I was out of spirits—was it the weather, &c.—until I became so irritated that I rose from my seat and left him.

'To my dismay, as I was crossing the room, I found Mr Faithfull's eyes intently fixed on me, as if he had been watching my proceedings, and was striving to read my character. He turned away as soon as he saw I noticed him, but throughout the

evening I observed him bent on the same study, until I became so conscious and embarrassed I did not know what to do; for the odd part of it was, he never once spoke to me. He only flung about me a chain of fascination, from which I found it impossible to escape.

'He remained with the Nugents for a time, and then removed to his club, I imagine. I saw him frequently. He never sought, and he never avoided me; while I—and this, Amy, is my shame and torment—could not hide from him how much I felt. He must have seen it in my face each time we met. How I have detested—how I abhor myself when I remember that it is I who am the wooer, and he just suffers my attentions! Our positions are entirely reversed; and the worst of it is, I can no more help its being so than the poor little needle, or the miserable steel-filing, can help being attracted by the magnet. He visits at our house, is liked by my family, I, each day, growing more and more feverish and impatient for some sign of preference, which, alas! he never gives. Polite he always is, but as cold as death; while I, poor lost soul that I am, have grown more hopelessly infatuated than ever, until I fear I am fast becoming a monomaniac.

'This, dear Amy, is my miserable story, which I have been wishing some time to confide to you. Clytie looks mournfully at me, as though she said: "I, too, suffered as you do; they suffer most whose natures are strongest to love most, for they are *faithful* even unto death." Is his name to be woven *thus* into my life? God forbid! And yet, unmaidenly as the speech may sound to other ears than yours, I know but too well that his name *will* be woven into my life, whether as faithful unto death in sorrow, or worn with joy for ever. Adieu!"

She finished writing, and was about to close her letter, when a fresh thought struck her, and she continued: "It is said, not without some truth in my case, that the most important part of a woman's letter lies in the odd piece of intelligence she just remembers when it is about to be posted. I was going to omit telling you that I know nothing whatever about Mr Faithfull, except that Harry Nugent says he is a man of good means and family in the North; beyond this, he is so singularly reticent on all points concerning himself, that I do not know if he has a relation living. That he has been travelling for some time, is the single information he gives, and he is *only* warned into communicativeness when on the subject of the countries he has visited. His reticence on other points is painfully tormenting, since it arouses all my curiosity to strive to fathom him. I sometimes think there is a mystery about him, for when he imagines himself unobserved, there comes into his face an expression of melancholy so profound, that it is with difficulty I restrain the longing I have felt at such times to snap the bands of conventionality, and ask him its cause; for, alas! as I have already told you, he sees but too well, I fear, that my heart is utterly his; and—but how can I describe to you the pain and shame of this disclosure?—the more he sees it, the more he shrinks from me. Does he despise me? I dread to ask the question of myself.

'It is positively inhuman to despise a woman for the offering of her soul's richest blossom, even if there is no heart left to pluck it. If he does not

care for me, I feel that I have done nothing worthy of his contempt, for I have simply loved him beyond the power of my will to control. Love, the lord of all, has taken the helm of my small bark, and while he holds the rudder in his hand, I shall be kept floating ever on *faithful* waters.

'How I can see you smile as you read this, and suggest to yourself the necessity of coming to stay with me for a little, as you consider my case such a bad one that I am hardly responsible. Come, dear friend; the Clytie has unloosed my speech, and made me tell you all. It is more than probable that I shall need you, for loving as are those about me, the fear of paining them, especially my dear mother, forbids my disclosing all I have written to you; and if the worst comes to the worst, and he goes away without a word, then, Amy, let me have you near me, that my heart may not be left to break utterly without sympathy. Human suffering has its depths, but I question if it has one, psychologically speaking, that will equal mine in such a case. Come, therefore, as soon as you can.'

Having at length written all she wished, she closed her letter, and sent it to the post. Feeling the vacuum left by the accomplishment of a pleasant duty, she sat back in her chair, and with her hands clasped across her eyes, indulged in a reverie.

Marian Elton was a girl of twenty-five; in all the glory of early womanhood: bright, fascinating, intelligent, and accomplished, she was the centre of attraction wherever she went. She had more than one offer; from rich men, who would have given their wealth to endow her; and from poor men, who only asked to toil for her. But she was a woman 'true to herself' in her determination only to marry whom she loved; and there was not a man among those she rejected who did not feel that they valued her more in her refusal of their love, than its acceptance, if that were possible; for it shewed them a true womanly nature, whose goodness converted their failure to win her love into friendship. She healed their wounds by making them feel, that though unsuccessful, they had not loved unworthily, which was flattering at least to their discernment, and upheld their self-respect; for if we are to be judged by the affections we aspire to gain, it is surely more ennobling to have aimed high even to failure, than to have sought and won only the inferior.

Her reverie was interrupted by a startling double-knock at the hall-door, and from her point of observation at the window, she saw that it was Leonard Faithfull who was calling. 'Should she receive him? Her mother was out. Perhaps he would not ask for her.' Further surmise was cut short by his entering the room. She found it difficult to speak to him; with her mind so intensely occupied as we have seen, calmness and an absence of self-consciousness were out of the question. Every nerve within her was vibrating so keenly that she felt cold and speechless with emotion. His embarrassment was scarcely less than her own, but it was the agitation of a man determined *not* to see or feel. They sat for some time making commonplace remarks about the weather and society, and then his eye fell upon the Clytie.

'Do you believe such constancy possible, Miss Elton? Do you think the woman lives, apart from mythology, who is capable of loving continuously where it is not returned?'

He asked the question pointedly, almost savagely, she thought. Her quick, warm feelings were so shaken by it, that she replied nervously: 'It is more a question of experience and principle than of opinion, I fancy. If a woman thinks she has loved worthily, she would be doing violence to her better nature were she untrue to her faith. I can quite understand the constancy of Clytie, who could not be satisfied with or give her heart to other than the sun-god. Once she had become penetrated by the rays of his perfection, how was it possible she could offer the tribute of her highest love and worship to any lesser light? Therefore, the Clytie for me is but the symbol of the truth, that constancy to what one considers the noblest, becomes the law of necessity.'

He held his eyes on the ground while she spoke, nor raised them once while she uttered, with pathetic earnestness, a truth he had made her feel all too keenly. He offered no reply when she finished, and a pause ensued, which he was the first to break in a voice which repulsed all tenderness, as he said with apparent carelessness: 'I am sorry Mrs Elton is not at home, for I called to wish you all good-bye. I resume my wanderings to-morrow, after having been a sad idler. This time, I am going west: I daresay you will hear of me as having come to grief in some of the wilds of South America. I fear I cannot stay until Mrs Elton returns,' he added hurriedly, with averted eyes. Unable to meet her look of agony, he opened his watch, and then, as if late, he said: 'I have several visits to pay, and must wish you good-bye, Miss Elton; kindly present my compliments and adieux to your family.' She was just conscious that he took her hand, had shaken it coldly, and was gone!—gone! without even one kind word or look!

'Oh, how cruel! how inhuman!' she exclaimed, as she flung herself into a chair, benumbed with an anguish that was tearless. 'He is unworthy!' was her first decision, which buoyed her up with relentless endeavour to fling his memory from her heart; but all in vain! He was the sun-god of her woman's worship, towards whom her gaze would ever turn; for the voice of her own soul, stronger than opinion, louder than fact, whispered she had not been mistaken, and that he was worthy of her homage; even though he left the blossom of her love to pine for ever on its stem.

CHAPTER II.

Five long years had passed, each repeating its story of the seasons, and still Marian Elton was unmarried. One suitor after another came and went, to the disappointment of her family and the wonder of her friends. Her faithful friend and confidant, Amy, alone knew the truth which her mother partially guessed when she used to say: 'That Clytie has bewitched you, Marian. I hope you are not grieving after some impossible hero. I declare, some day I shall enter into a conspiracy to throw her from her pedestal; you have never been the same girl since the day you bought her.'

To this, the only secret of her life, Marian offered no reply, for she knew her mother's

surmises were but too true, and she feared to pain her by confirming them.

It must not be supposed, however, that she was unhappy all this while—far from it. After the first wild burst of sorrow was over, she found consolation in duty, study, and the affection of those around her. To all these she returned with redoubled energy, and the result was, that at thirty years of age Marian Elton, so far from developing a tendency to old-maidishness, had ripened into a character of ennobled worth. The only problem people ever hazarded about her was 'why she never married.'

Occasionally, when alone with her Clytie, the old sorrow would bleed anew, as she thought of the past, and the similarity of their fate. But suffering, she argued, though differing in intensity, was the lot of all. There was no life without its hidden wounds, some scarred over by the healing hand of Time; others, again, that would never cicatrise; but one and all were bearing on their hearts some mark of painful encounter on the battle-field of life. Well is it for those who come forth from the strife 'perfected through suffering,' as did Marian Elton.

Her friend Amy had married so happily that she never wearied urging upon her to let go the past, and find consolation in bestowing herself upon William Blakeney, who, with exemplary patience, was proving the truth of his determination never to take her 'No' for an answer.

'It is positively cruel of you, Marian, to waste his life as you are doing, all for an idea! for as long as you are single he will never marry,' said Amy, who at this time was on a visit to the Eltons. 'It is now five years,' she continued, 'since that unfortunate craze of yours, and it seems to me you really are little short of a monomaniac, as you used to tell me to call you, to have preserved thus long the recollection of such an unpleasant abstraction—for he was nothing more.'

'Please, don't talk of my marrying any one, Amy. I am happier far as I am. Dear good Blakeney! I would do anything in the world to reward his kind faithfulness—anything, that is to say, but marry him. I have told him so repeatedly, and it is his own fault, not mine, that he continues as he does. But do not vex yourself about him; he knows my mind, and is content to be my very good friend.'

'Content! No! Resigned, you mean. He will never marry as long as you are single. I am sure he is only waiting to see what becomes of you.'

'Poor man! What unnecessary trouble to give himself on my account. I fear it will keep him occupied all his life; for this is a point upon which I am resolute, not from obstinacy, but necessity.'

'I begin to believe that your mother is right, and that you Clytie has indeed bewitched you. You may depend upon it, Marian, that you are under a spell, which will not be broken until that unhappy little nymph falls a sacrifice. I have half a mind to be the priestess who shall deal her the blow.'

They were sitting together working in Marian's boudoir at the time, and the Clytie stood on a slight table near. Without the least intention of fulfilling her words, Amy pretending she was about to carry her design into execution, rose hastily in play, when her dress catching in a chair, she stumbled, and in her fall knocked over the table,

and the little image fell to the ground smashed to pieces!

'Oh, what *have* you done!' cried Marian as she sprang forward, too late to save her favourite. The tears were in her eyes as she picked up the broken fragments; and she looked reproachfully at her friend, unable, in her distress, to believe that she had not wilfully carried out her intention.

'I am so grieved!' said Amy with genuine vexation at the accident which pained Marian so visibly. 'Indeed, I was not in earnest about breaking it. I will get you another in Parian; this was only plaster of Paris.'

'Ah! it would never be the same,' she sighed. 'This one has been my companion since the first hour of my sorrow, and I have found strength in her companionship. Poor Clytie! No, Amy, no other model shall ever take her place.'

'I am so sorry. Still, if the spell be only broken, how I shall rejoice; I shall have done poor Blakeney a good turn, for which he will always bless me,' said Amy, smiling.

'You are adding insult to injury,' replied Marian sadly. 'Come; it is time to dress for dinner; the Nugents dine with us.' And her hands were full of the broken pieces of the Clytie as she was leaving.

'What are you going to do with them?'

'Bury them in a silken shroud in my drawer.'

'Was there ever such infatuation as yours, Marian! You have earned the name of Faithful with reference to the owner, and might inscribe it on your tablets without any permission of his.'

'Amy! hush! His name has never passed my lips since that day.'

'Never mind; the spell is broken at last, and there is hope once more for others.'

As it was only a family party, Marian, who had been indulging in some private grieving over the remains of her Clytie, was the last to appear.

'I've got some news for you,' greeted her on entering the drawing-room, from her cousin Harry. 'I had a letter just as I came out: from whom, do you think?'

'How can I tell, Harry?'

'Guess.'

'Impossible; you have such a host of friends.'

'No, I don't suppose you ever will guess, for I had almost forgotten him. I thought he was dead; I have not heard from him since he left us five years ago. You know now whom I mean—Faithful—he is in England.' There was an exclamation of surprise from all in the room but Marian, through whose frame the announcement passed like an electric shock, although she had sufficient presence of mind to listen passively. 'And he sent me the oddest piece of news in the world—that his wife is dead! I never knew he had a wife before.'

'Poor man,' said Mrs Elton sympathetically.

'Poor man! you may well say, when you hear the rest of the story. It seems he was married privately, some eight years ago, in Italy, and that his wife went out of her mind almost immediately after their marriage.'

'Then he must have been a married man all the time he was with us!' exclaimed Mrs Elton with dismay, not unmixed with thankfulness. 'How very extraordinary, not to say wrong of him, not to have told us. It is so dangerous when married

men pass themselves off as bachelors; they are nothing less than wolves in the fold, to my mind. Only think, if some of you girls had fallen in love with him!

'Well, I suppose he trusted to not making his attentions pointed enough to raise any question of that kind,' said Mr Nugent; 'and I can quite understand his not caring to talk about or publish such a painful fact of his life, especially as his marriage, it seems, was a secret one. Men, as a rule, don't like condolences on such events.'

'I suppose not,' said Mrs Elton, who, perceiving that her fold had escaped damage from such a calamity as might have overtaken it, was ready to be magnanimous towards the culprit, by admitting the excuses in his favour; and was about to let the subject drop, when Mr Nugent continued: 'He seems not to have forgotten the time he was with us, for he makes minute inquiries after every one, and wants to know who Miss Elton married.'

'Indeed, you can tell him, with my compliments, that Miss Elton has been very remiss on that point,' said her mother, smiling; while Marian, hardly knowing how she endured it all, remained silent, struggling with the faintness such strange tidings produced.

Amy, who alone saw and knew what she was suffering, came to her rescue at last by pretending she had forgotten something. As she was about to leave the room, she beckoned Marian to follow her.

'Bless you for this!' cried Marian, as soon as the door was closed. Rushing up to her room, she fought with her agitation until restored to calmness, and she could go among them again as though nothing special had occurred.

A week later, and Harry Nugent came one morning to tell her that Faithfull had accepted an invitation to stay with them. 'He begged particularly to be remembered to you, Marian, and expressed great surprise at hearing you were not married.'

To paint her feelings as her cousin thus brusquely touched upon her most cherished secret is not possible. She blushed crimson, and begged him to desist, as he rallied her upon what he termed 'her strange infatuation for single-blessedness.'

Meanwhile, in her heart, the sickness of deferred hope was blossoming into a tree of life! But for what? she asked herself. For nothing but the bitterness of a greater disappointment, perhaps; to find that she was powerless to win him in his freedom, as his honour forbade him to be won in his bondage!

The thought of how, and where, she should first meet him, gave her uneasiness. What would he say? Would her tell-tale face betray her, or had the years which had passed brought her the power she before lacked? What days and hours of suspense, that fled all too quickly, and yet seemed interminable, through her mingled sensations of hope and dread, which longed for, yet dreaded the hour of meeting!

It was some days before the one fixed for his arrival, that she was startled one morning by having his card put into her hand by a servant, who summoned her to the drawing-room.

She scarcely knew how she ever reached or entered the room; she can only think that she must have turned deadly pale on seeing him, and that he read on her face the history of her faithful heart, which had been true to him throughout the years; for without being able to remember how

it happened, she found herself in his arms sobbing out her welcome.

'Thank God, you read me rightly, Marian!' he murmured, as soon as the first outburst of feeling permitted him to speak. 'Your heart must have told you intuitively, in years gone by, that, had I dared, I would gladly have returned the love I saw was mine; but not for worlds would I, at that or any time, have wounded your self-respect and sense of honour, by allowing you to know that you had given your heart to one whom it is counted a wrong to love. I judged it better, therefore, by my coldness, to wean, or even repulse you—though in so doing I left myself open to the pain of being charged with want of feeling and heartlessness—rather than leave you the double suffering of finding that you were beloved by one who was powerless to claim you. You know, I think from Nugent, one portion of my story; I will tell you the rest.'

'When in Italy, I married without the knowledge, and therefore without the consent of my family (from whom I wished to keep it secret), a lovely girl for her beauty, and found her temper, alas! owing to the latent seeds of madness, execrable. We had not been married very long before the disease became developed, and she was pronounced by the ablest doctors incurable. The passion her beauty inspired, her infected brain and temperament quickly exhausted, until I had soon no feeling for her but one of great pity, while I endeavoured to surround her with every care and attention that means could procure; but the love and companionship which is bound up in that most sacred word *wife*, was gone for ever.'

'I left her under medical care, and strove to forget my misfortunes, and avoid all questioning on the part of my family, by travelling; but it was not until I came to England and met you, that I knew *how* doomed was my life! May you never know what I suffered when I used to watch you pleading silently, with eloquent dumbness, for the affection I loved you far too well to declare; for I determined that no shade of dishonour should ever trouble the heart I had learned to reverence above all others on earth. But as soon as I was free, Marian, my first thoughts were for you. My first visit, on hearing from Nugent, is to you, to see if your heart is still, as I prayed it might be, all my own; and, ah! I have been well rewarded; for this meeting more than compensates for years of sorrow.—And Clytie? I have not forgotten her.'

'Broken!' she whispered, 'on the very day I heard of you again. She kept me faithful to my sun-god, and vanished only on his return.'

'When he came, to gather the rich blossom of your love, and wear it on his heart for ever!'

THE MONTH: SCIENCE AND ARTS.

At the opening meeting of the Epidemiological Society, Mr N. Radcliffe stated in his address, that the obscurity in which epidemic diseases were involved arose mainly from their having been talked and written about in a hazy way and in indefinite terms. But a change has taken place since Sir Thomas Watson said, some years ago, in one of his lectures: 'You will hear persons disputing about the term contagion; but such

disputes can only arise from the want of a distinct definition of the sense in which it is employed; I understand a disorder to be contagious when it is in any way communicable from person to person.' Since then, medical men have discovered that there are different forms and modes of contagion; and they now know that there is a difference between typhus and typhoid fever, that their modes of communication are totally unlike. 'This discovery,' said Mr Radcliffe, 'has prompted researches into the habits of particular diseases, which have shewn contagion acting widely on one hand on common inflammatory diseases which fall within the surgeon's sphere of duty, and on the other in certain wide-spread chronic maladies.' Hence it is that of late years there has been so much progress made in exact researches into the nature and habits of contagious diseases of all kinds. 'Recent astronomical and meteorological investigation,' said Mr Radcliffe, in concluding his address, 'have established a relationship between certain larger cyclical meteorological phenomena, and successions of good and bad crops with particular cyclical solar phenomena. Here is the clue for the beginning of an analysis of the cosmical relations of epidemics, of periods of dearth (relapsing and typhus fevers), and of epidemics most sensitive to meteorological changes (diarrhoea, typhoid, cholera). Such an analysis, so far as this country is concerned, has been made possible by the prescient labours of Dr W. Farr, F.R.S. (of the General Register Office), which, beginning in 1837, have been continued to the present time.'

Dr Van Buren of New York says something to the same effect in an American periodical. Diseases once classed together, are now recognised as distinct, as occasioned by different poisons. The poison of measles, for example, is different from that of scarlet fever, and the poison of small-pox is different from that of whooping-cough. With our advancing knowledge of the difference between typhus and typhoid, we learn that those diseases may be regarded as 'preventable.' 'Pyæmia,' remarks Dr Van Buren, 'is now distinguished from phlebitis, and established as a blood disease. In like manner there are, probably, diseases now grouped together and treated of in surgical works as identical (erysipelas, pyæmia, and diffuse cellular inflammation), which not many years hence will be recognised as entirely distinct in their origin and nature. It is worth while to remark that advance in knowledge consists, in a large degree, in learning to discriminate, or make distinctions, where before no distinctions had been recognised.'

Mr Moon has stated, in a communication to the Odontological Society, that the stump of a tooth may be preserved as the basis of an artificial tooth, and rendered painless, by leaving the root canal empty, and drilling a hole into it just below the free edge of the gum. This hole becomes a permanent vent, and thus saves the stump from disturbing influences, which, if deprived of means

of escape, would ultimately destroy it by a painful process.

It is known to agriculturists that nitrogenous manures favour the growth of abundant crops of grain, and yet the grain when ripe contains but a comparatively small percentage of nitrogen. On the other hand, leguminous plants, such as beans and peas, which grow best when treated with a mineral manure containing potass, and are 'almost abolished' by a nitrogenous manure, yield a very high percentage of nitrogen. This is a case worth inquiring into, and we learn from Dr J. H. Gilbert, that he and Mr Lawes have often felt that 'if they could determine the source of the nitrogen of the fungi growing in fairy rings, some light might perhaps be thrown on the question of the source of the nitrogen of the leguminosæ.' They have made experiments and observations; but have not yet settled the question. Meanwhile, an account thereof is published in the *Journal* of the Linnean Society, where it may be studied by any one interested in the subject. It is remarkable that one-third of the dry substance of fungi consists of nitrogenous matters. 'In fact,' says Dr Gilbert, 'fungi would appear to be among the most highly nitrogenous of plants, and to be also very rich in potass. Yet the fungi have developed in fairy rings only on the plots poorest in nitrogen and potass.' Such being the facts, 'the questions obviously arise, whether the greater prevalence of fungi under such conditions be due to the manurial conditions themselves being directly favourable for their growth; or whether, other plants, and especially the grasses, growing so sluggishly under such conditions, the plants of the lower orders are the better able to overcome the competition, and to assert themselves.' It is in the hope of eliciting an answer to these questions that the subject has been laid before the Linnean Society.

It has been noticed in the United States that trees raise themselves, and seem to grow taller, when, in fact, they have done growing. The thickening of the roots was supposed to be the cause; but Dr Lapham, botanist and State geologist of Wisconsin, has investigated the subject, and finds that frost exerts a lifting power on full-grown trees; and his conclusions have been confirmed by observations made near Philadelphia. The way in which it shews itself is thus explained in a communication to the Academy of Natural Sciences in that city. What we know of the action of frost on growing plants, says the writer, is that, as farmers say, it 'draws out.' 'When the land freezes, expansion ensues, drawing the clover up with it, leaving, of course, a cavity from whence the root was drawn. When the first thaw comes, the liquid, carrying earthy matter, enters the cavity, and thus the clover root is prevented from descending to its original position. The same process takes place with trees. The roots, when once elevated, cannot descend to their original position.' These particulars have led to the suggestion, that 'one of the chief offices of the tap-roots may be to

guard the tree as much as possible from this frost-lifting.

Some members of the Academy are investigating the question, Whence do leaves get their colouring matter in autumn? The English oak, if planted in America, never assumes the gorgeous tints of American trees; and American trees, if planted in Europe, go on producing the rich colours just as when they were at home. The observers, at the present stage of the inquiry, are of opinion that the colour is produced by 'vital action of some sort,' and that it is not due merely to sunshine, air, or decay.

In a recent *Month*, we noticed the discovery of minute animals, rotifers, in the joints of pavements in Philadelphia. Here is a description of another small creature, *Gromia*, taken from the Proceedings of the Academy above mentioned. 'Imagine,' says Professor Leidy, 'an animal, like one of our autumnal spiders, stationed at the centre of its well-spread net; imagine every thread of this net to be a living extension of the animal, elongating, branching, and becoming confluent so as to form a most intricate net; and imagine every thread to exhibit actively moving currents of a viscid liquid both outward and inward, carrying along particles of food and dirt, and you have some idea of the general character of a *Gromia*.'

This complicated creature is a cream-coloured ball about one-sixteenth of a line in diameter, and it lives on the pavements. 'When placed in water, in a few minutes it projects in all directions a most wonderful and intricate net. Along the threads of this net (which are less than one-thirty thousandth of an inch in diameter) float minute naviculae from the neighbourhood, like boats in the current of a stream, until reaching the central mass they are there swallowed.' Professor Leidy's observations lead him to conclude that during dry weather the tiny creature remains quiet in the dust, and that when rain falls it spreads its net and gathers food; and thus passes through periods of activity and repose.

Mercury in a watch-glass with a small quantity of very dilute sulphuric acid and bichromate of potassium, will, when touched with a needle, alternately dilate and contract. The explanation is, that a process of oxidation and deoxidation takes place. The same phenomenon may be produced by an electric current. This movement of the mercury has been taken advantage of as a motive-power in the working of a small machine. By the sinking and swelling of mercury in two cups placed in a trough of acidulated water, an up-and-down motion is originated, which can at pleasure be converted into a rotary motion. So feeble a current suffices to keep this machine going, that the suggestion has been made that it (the machine) may be employed as a very sensitive electrometer; and probably, though only a curiosity at present, it may be found available for other purposes.

Chemists have discovered further proofs of the metallic character of hydrogen—namely, that hydrogen will unite with potassium and sodium, and form a hydride of each of the two metals. These products are described as having a metallic lustre, and the general physical appearance of a metal.

Syrups are largely used in the United States, and it appears that there are certain manufacturers who, by chemical hocus-pocus, convert starch into grape-sugar, as a cheap way of getting a material

out of which they make the syrup. A Report on the subject has been published, and from this we learn, that of seventeen samples of sugar examined, not more than two were cane-sugar: all the others were concocted from the artificial product, and were found to contain many impurities—lime, sulphuric acid, iron, lead, and 'dirt' being among them. The use of syrups at evening-parties and in summer drinks is thus seen to be attended by disagreeable consequences; and in this fact we have another example of the employment of the arts for purposes of fraud.

And there are manufacturers who, in printing and finishing calicoes and muslins, make use of arseniate of glycerine and acetate of clay, instead of the usual harmless gum. The consequence is, that in every yard of those calicoes or muslins sold to customers there is a small amount of poison.

In Saxony, a method of hardening sandstone has been tried with success. The stone is soaked in a solution of alkaline silicates and of alumina, which penetrate some inches, and impart so great a degree of hardness to the surface, that it will bear polishing, and has the look of marble. If exposed to great heat, the surface vitrifies, and may be coloured at pleasure.

A solution of castor-oil with two or three times its bulk of absolute alcohol, if spread on thin drawing-paper with a sponge, will make it transparent, and convert it into tracing-paper. The alcohol evaporates, and the paper is then ready for use. The drawing may then be traced in crayon or Indian ink. If then the paper is soaked in alcohol, the oil is dissolved and removed, and the sheet is restored to its opaque condition.

It is a common saying among sailors that heavy rain falling on the sea stills the motion of the waves—or, as they phrase it, the 'rain soon knocks down the sea.' Professor Osborne Reynolds, of Owens College, Manchester, has made experiments which demonstrate that the saying is founded on fact; for when drops of water fall on the surface of water, they not only produce the usual rings, but they drive some of the surface-water downwards in series of rings which increase in size. To replace the water carried down, some of the under water would have to rise to the surface. 'When,' says the Professor, 'the surface is disturbed by waves, besides the vertical motion, the particles move backwards and forwards in a horizontal direction, and this motion diminishes as we proceed downwards from the surface. Therefore, in this case the effect of rain-drops will be to convey the motion which belongs to the water at the surface down into the lower water, where it has no effect so far as the waves are concerned, and hence the rain would diminish the motion at the surface, which is essential to the continuance of the waves, and thus destroy the waves.'

The end of the year brings the time when meteorologists as well as merchants take stock, and sum up their annual accounts. Hence, we shall soon have particulars of the memorable rainfall of 1875. It was in many places of the kind described by observers as 'torrential,' and not a few among them have had to record the 'wettest days' within their experience. In Oxfordshire and adjacent counties, nearly eight inches of rain fell in the single month of October; five inches more than the average. No wonder that floods prevailed!

OUR OLD DOG JACK.

OLD Jack ! we scarce yet count him dead ;
The unforgotten never dies !
Though mound of earth with primrose set,
'Neath hawthorn tree shews where he lies.

A faithful friend for thirteen years,
Grateful for every kindness shewn ;
And were there any fault to find,
He ever held that fault his own.

No new friend came 'twixt us and him ;
No fortune tried his fealty fast ;
Come weal or woe, whate'er might 'tide,
Old Jack was loyal to the last.

Had danger come, no thought of self ;
No matter what the odds, a raid,
To guard his household friends from harm,
Upon a hundred he had made.

His gratitude, unswerving love,
His patience, trust, outstrip who can ?
His courteous ways to those he loved,
For Jack was quite a gentleman.

O Darwin ! were thy theory true.
How great a race might walk the earth,
When dogs, to full perfection brought,
Had found Development's last birth—

Ay, whether pure, or mongrel cur,
Such qualities in them abound,
Which in the prouder human race
Are, to our shame, oft lacking found.

Old Jack ! I sometimes wondering muse
If that thy being can be o'er ;
Or whether for the canine race
Some planet may not be in store,

Where dogs may have a little peace,
After rough life of kicks and blows,
Scant meals, hard words, and shelter poor ;
Some compensation for their woes—

And where the vivisector's knife
May never meet their pleading eyes,
For Science, blest with finer sense,
Needs not the cruel sacrifice—

And though some scoff, and bid me drive
As wild, profane, the theory hence ;
I ask, why so ? Why should there be
A waste of such intelligence ?

Look all around—no atom lost,
Say, where do wonders cease—or lead ?
How shall ye fathom out the end,
Who the beginning cannot read ?

Ay, call it folly, if you will,
Such idle lines as these to pen ;
But truer friend than poor old Jack
One finds not 'mongst our wanted men—

Through love to him, the love I bore
To all his kind took deeper root,
And pleading dumb creation's rights,
Shall be of old Jack's life the fruit—

Yes, long as I a pen can hold
'Gainst cruelty a line to trace,
Old Jack shall live in every line
The benefactor of his race.

J. G.

THE HOUSE-FLY.

The familiar house-fly (*Musca domestica*) is apt to be considered an unmitigated pest. It is therefore time to call attention to some recent investigations of a chemist, which go to bear out the pious axiom that everything has its use. This observer, noticing the movements of flies after alighting, rubbing their hind-feet together, their hind-feet and wings, and their fore-feet, was led to explore into the cause ; and he found that the fly's wings and legs, during his gyrations in the air, become coated with extremely minute animalcula, which he subsequently devours. These microscopic creatures are poisonous, and abound in impure air, so that flies perform a useful work in removing the seeds of disease. Leanness in a fly is *prima facie* evidence of pure air in the house, while corpulency indicates foulness and bad ventilation. If these observations are well founded,* the housekeeper, instead of killing off the flies with poisonous preparations, should make her premises as sweet and clean as possible, and then, having protected food with wire or other covers, leave the busy flies to act as airy scavengers.—*Hardwick's Science Gossip.*

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By JAMES PATN,

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END OF TWELFTH VOLUME

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